

REMARKS

The Examiner's Office Action of November 29, 2004 has been received and carefully reviewed. Claims 1, 4-7 and, 9 -14 have been amended, no claims have been cancelled or added. Therefore, claims 1-23 are pending in this application. For at least the following reasons, it is respectfully submitted that this application is in condition for allowance.

Initially, it is noted that this Amendment increases the total number of independent claims pending in the application to four (4) from one (1), thus, requiring a further excess independent claim fee of \$ 200.00 for one excess independent claims while the total claim number is not changed by this amendment . Please charge the necessary fee of \$200.00 to our Deposit Account No. 50-0945.

First of all, claims 4-14 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of limitations of the base claim and intervening claims. Since claim 4 was used to depend from claim 1, amended claim 4 is written in an independent form including all limitation of claim 1. Since claim 9 was used to depend from claim 2, which depended from claim1, amended claim 9 is written in an independent form including all limitation of claims 1 and 2. Since claim 12 was used to depend from claim 3, which depended from claim2, which depend claim 1, amended claim 12 is written in an independent form including all

limitation of claims 1, 2 and 3. Thus, amendments to claim 4, 9 and 12 are in compliance with the examiner's suggestion. Accordingly, Applicant believes that objection against claim 4, 9 and 12 are no longer applicable. Further, since objected claims 5 –8, 18-20 depend from claim 4, since objected claims 10 and 11 depend from claim 9, and since objected claim 13 and 14 depend from claim 12, these objected claims depend from allowable independent claims 4, 9 and 12 now. The Applicant respectfully request to withdraw the objection and to allow these claims.

Further, in the Action dated November 29, 2004, claims 21 – 23 were neither rejected nor allowed. However, these claims depend from allowable independent claims (claim 4 or claim 9) indirectly now. Thus, Applicant respectfully requests to allow these claims.

In the Action, claims 1-3, 15 and 16 (maybe 17 also) are rejected under 35 U.S.C. 102(b) as being unpatentable by or, in the alternative, under 35 U.S.C. 103 (a) as obvious over Jackson et al. in view of applicant's admitted prior art or Hawkins et al. The invention defined in independent claim 1 relates to a micro-controller. The characteristic of the invention claimed in claim 1 is,

- (a) **a logic circuit**, which receives the second signal and the third signal, outputting fourth output signal, the fourth output signal being in the first logic level when both of the second and the third output signals have the first logic level, and the fourth output signal being in the second logic level when the logic levels of the second and the third output signals is in the other conditions, and

- (b) an oscillating circuit generating the oscillation signal having a frequency, the oscillating circuit being inactivated in response to the fourth output signal having the first logic level, and the oscillating circuit being activated in response to the fourth output signal having the second logic level.

According to this structure, in response to the watching result performed in the transfer control unit, a mode of the transfer control unit can be changed between operable and inoperable modes. Further, in response to the modes that both of the transfer control unit and the main control unit are in inoperable mode, the operation of the oscillating circuit is halted. Thus it is possible that the oscillating circuit is maintained to be in an operable mode when one of the transfer control unit and the main control unit is in operable mode. This feature is specifically performed by the logic circuit described in amended claim 1.

On the other hand, Jackson et al. disclose that in response to a condition of an activity signal from a suspend control circuit 242, a microcontroller circuit 301 generates a suspend signal. As a result, a clock in the suspend control circuit 242 and an oscillator unit 302 in a USB device 241 are disabled. However, according to the Jackson et al., the microcontroller circuit 301 generates a suspend signal in order to disable the oscillator unit 302 by simply responding the condition of the activity signal from a suspend control circuit 242. In other words, the disablement of the oscillator unit 302 is not a result of the operating condition of the microcontroller circuit 301 itself. Thus, in the circuit disclosed in Jackson et al., when the suspended signal is outputted in response to the activity signal from a suspend control circuit 242 while the microcontroller

circuit 301 has another task, any clock signals, which are necessary to activate the microcontroller circuit 301, are not provided to the microcontroller circuit 301 because the oscillator unit 302 is disabled. In such a case, the microcontroller circuit 301 cannot work properly. On the other hand, according to the microcontroller of the present invention, as described above, it is possible that the oscillating circuit is maintained to be in an operable mode when just one of the transfer control unit and the main control unit is in operable mode.

Hawkins et al. simply disclose that a clock control unit 26 is controlled by a power management unit 24. Thus, Hawkins et al. disclose neither that the oscillating circuit generating the clock signal itself is suspended, nor that the oscillating circuit is maintained to be in an operable mode when just one of the transfer control unit and the main control unit is in operable mode.

As to the admitted prior art, it does not disclose the logic circuit having the characteristics described above.

Therefore, since neither the admitted prior art, Jackson et al. nor Hawkins et al. themselves or in combination does not disclose or suggest the claimed micro controller having the characteristics (a) and (b) described above, claim 1 clearly is not anticipated by admitted prior art, Jackson et al. and Hawkins, and is deemed to be clearly patentable over them, and the rejection of claim 1 accordingly should be withdrawn.

Further, claims 2, 3, 15-17 depend from claim 1 directly or indirectly. Since Applicants believes that claim 1 includes a patentable subject matter, the rejection of claims 2, 3, 15-17 depended from claim 1 should be withdrawn.

It is noted that this Amendment has been prepared using the requested new format. If there are any irregularities in this format, it would be greatly appreciated if Applicant's Counsel would be so advised

In view of the foregoing, the application is deemed to be in condition for allowance and such is earnestly solicited. Should any fee be further needed, please charge it to our Account No. 50-0945 and notify us accordingly.

Examination of the application is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Junichi Mimura', with a long horizontal flourish extending to the right.

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